5   updating said second form line according to one or more deviations from said second

6   form line <u>by following said second form line defined by said positioning data and said</u>

7   <u>swathing offset, deviating from said second form line to accommodate one or more terrain</u>

8   <u>features, collecting new GPS data during said steps of following and deviating and</u>

9   <u>computing one or more positions therefrom, and defining an updated second form line</u>

10   <u>using said positions.</u>

1   *2.* (Amended) A method as in claim [2] <u>1</u> further comprising the step of defining a third

2   form line using said positions and said swathing offset.

1   *3.* (Amended) A form line following apparatus, comprising

2   a vehicle fitted with a GPS receiver configured to receive GPS data and GPS

3   correction information and to compute position information therefrom; and

4   a processor configured to [compute] <u>define an updated form line according to</u>

5   <u>position information computed while the vehicle was (a)</u> [form line] following <u>a previously</u>

6   <u>computed form line having been defined using positioning data derived from earlier</u>

7   <u>received GPS data and a swathing offset, and</u> (b) <u>deviating from the previously</u>

8   <u>computed form line to accommodate one or more terrain features</u> [information from said

9   position information and to update said form line following information in response to form

10   line deviation information].

1   *5.* (Amended) A form line following apparatus as in claim *3* further comprising a display

2   device configured to receive and display [said] form line following information

3   <u>corresponding to the updated form line.</u>

1   *6.* (Amended) A method of form line following, comprising [the steps of:]

2   [computing a form line pattern for at least a portion of a plot of land from one or

3   more data values retrieved from a computer readable storage medium, said data values

4   associated with terrestrial locations comprising said portion of said plot of land;]

5   controlling a vehicle so as to follow [said] a form line computed [form line pattern

6   over said plot of land] using positioning information provided by one or more sources of

7   GPS information while the vehicle was (a) following a previously computed form line

8   having been defined using earlier positioning information and a swathing offset, (and/or) (b)

9   deviating from the previously computed form line to accommodate one or more terrain

10   features encountered while following the previously computed form line[;

11   computing an updated form line pattern in response to form line following correction

12   inputs, said updated form line pattern being derived from one or more deviations from said

13   positioning information; and

14   controlling said vehicle so as to follow said updated form line pattern].

1   12. A method [of applying chemicals to an agricultural field,] comprising [the steps of:]

2   operating a spraying apparatus along a [first intended] form line so as to apply

3   chemicals to a [first] portion of a field[; and

4   operating said spraying apparatus along a second intended form line so as to apply

5   chemicals to a second portion of said field,

6   wherein while operating said spraying apparatus,]. the form line having been defined

7   according to positions computed while (a) following a previously computed form line

8   having been defined using previously derived positioning information and a swathing

9   offset, and/or (b) making deviations from [said first intended] the previously computed

10   form line [are accounted] to account for one or more terrain features encountered [during

11   one of said steps of] while operating said spraying apparatus along the previously

12   computed form line.